academicJournals

Vol. 9(6), pp. 129-138, June 2017 DOI: 10.5897/JAHR2016.0393 Article Number: 6A973DD64348 ISSN 2141-2359

Copyright ©2017 Author(s) retain the copyright of this article http://www.academicjournals.org/JAHR Journal of AIDS and HIV Research

Full Length Research Paper

Towards a model for inputs evaluation for workplace HIV/AIDS IEC programme based on process evaluation theoretical framework

Umunnakwe, Anselm. C. R^{1*}, Grand, Balulwami¹, Moahi Kgomotso¹ and Umunnakwe Gertrude C.²

¹Department of Library and Information Studies, University of Botswana, Gaborone, Botswana.

²Federal University of Technology, Owerri, Nigeria.

Received 14 September, 2016; Accepted 7 December, 2016

The need for an appropriate evaluation model with respect to workplace HIV/AIDS information, education and communication (IEC) programme implementation necessitated this study. The study adopted the documentary research method. The documents review relied to a large extent on documents from the ILO, the Botswana governments' National Strategic Framework on HIV/AIDS and the Botswana Revised National policy on HIV and AIDS. Besides, the study also consulted other empirical literatures from electronic databases. These covered books, academic journals, official publications, websites of government and international HIV and AIDS organisations. In all, a total of 47 documents were reviewed. The criteria for the selection of the documents were being focused on HIV/AIDS policies, workplace HIV/AIDS information, education and communication programmes as well as theoretical frameworks. The key components of the input evaluation model (HIVADIEF Model) are programme intervention, resources, institutional support mechanisms and target groups. Each component had its measuring attributes. The study recommended HIVADIEF input evaluation model for researchers in the field of workplace HIV/AIDS information, education and communication programme evaluation in Botswana and elsewhere with a view to further developing and improving the input evaluation model for hospitality facilities.

Key words: Information, education and communication, workplace, theoretical framework, inputs evaluation, HIV/AIDS, Botswana.

INTRODUCTION

The Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) commonly referred to as HIV and AIDS is the most devastating disease to face humankind in the 20th century (Chileshe, 2010). Inspite of global, regional as well as national concerted

efforts, the pandemic continues to pose challenges (ILO and SAfAIDS, 2010). For example, since its advent, 78 million people have become infected; out of which 39 million have died of AIDS-related illnesses worldwide. In response to the formidable challenges posed by the

*Corresponding author. E-mail: ansegert56@gmail.com.

Author(s) agree that this article remain permanently open access under the terms of the <u>Creative Commons Attribution</u> <u>License 4.0 International License</u>

pandemic, the Botswana government strategy has been very impressive; and the country has shown signs of achieving some measure of management and control of this epidemic (NACA, 2015). The critical aspect of the response strategy has been the multi-sectoral approach adopted by the government. This approach emphasizes the development and implementation of workplace HIV and AIDS Information, Education and Communication (IEC) programmes and strategies by all organisations. This includes both government agencies and the private sector organisations. According to NACA (2014) the main objective of the multi-sectoral approach is to enable mainstreaming of HIV/AIDS issues in the work place. The entire national response was captured in the Botswana National Strategic Framework HIV/AIDS.

The Botswana national HIV and AIDS strategic framework is premised, among others, on both the prevention of HIV infection and research principles (UNDP, 2012). Under the research principle, the government of Botswana recognizes the important role research plays in identifying and implementing strategic responses to critical public health issues such as HIV and AIDS. Specifically, the research outcome is meant to assist government to develop strategies that will facilitate access to health-related programmes and services. To this end, the government has prescribed regular evaluation and monitoring of workplace HIV/AIDS programmes (UNDP, 2012). Meanwhile, there does not seem to exist any hospitality sector specific benchmark on which empirical investigations with respect to HIV/AIDS information, education workplace communication (IEC) programme input could be based in Botswana.

Although there exists input evaluation theoretical frameworks, existing input evaluation models are based on the general principle of input, process and outcome. Basing evaluation on these models does not allow for indepth evaluation of specific inputs which goes into workplace programmes. This is particularly so within the context of the hospitality sector workplace HIV and AIDS Information, Education and Communication (IEC) programmes in Botswana. To effectively evaluate a specific input workplace HIV/AIDS IEC programme, there is need for a model that plainly specify the input and its measuring attributes.

The goal of the study is to construct an input evaluation model suitable for adoption in the evaluation of workplace HIV and AIDS IEC programmes of the hospitality facilities within the hospitality sector in Botswana, and which is capable of being replicated anywhere else. Its essence is to limit the scope of the relevant data by focusing on specific variables and defining the specific viewpoint that a researcher will take in analysing and interpreting the data to be gathered (Labaree, 2014).

The theoretical underpinning for the proposed HIV/AIDS input evaluation model (HIVADIEF Model) is

the Context, Input, Process, Product (CIPP) developed by Phi Delta Kappa Committee on Evaluation in 1971 (Tokmak, et al., 2013). According to the CIPP concept, evaluation can be categorised in terms of context, inputs, process and product (Boulmetis and Dutwin, 2011). In the CIPP context, input evaluation deals with the very foundation of the programme; and supports other activities. In the absence of an input evaluation model for the hospitality facilities workplace HIV/AIDS IEC programme, the concepts and constructs from the various theoretical models reviewed were combined to develop the HIVADIEF evaluation model.

Statement of the problem

Hospitality facilities in Botswana are known to be implementing workplace HIV/AIDS IEC programme in line with the country's revised national HIV/AIDS policy. However, there is no evidence of any input evaluation study with regards to hospitality facilities in the country (Carden and Alkin, 2012). In the same vein, available input evaluation models were found unsuitable for input evaluation of workplace HIV/AIDS IEC programme of hospitality facilities.

The purpose of the study was to review relevant literature and to propose a model suitable for inputs evaluation of workplace HIV/AIDS IEC programme for hospitality facilities in Botswana, which is capable of being adopted for hospitality facilities in general.

MATERIALS AND METHODS

This study adopted the documentary research method (Mogalakwe, 2006). In the course of the documents review the study relied to a large extent on several documents from the ILO, the Botswana governments' National Strategic Framework on HIV and AIDS as well as the Botswana Revised National policy on HIV and AIDS. Beside the aforementioned documents which formed the primary documents, the study also consulted other empirical literatures sourced from multiple electronic databases. These covered books, academic journals, official publications, websites of government and international HIV and AIDS organisations. In all, a total of 47 documents were reviewed. The criteria for the selection of the documents were that; the documents focused on information, education and communication in relation to HIV/AIDS policies, IEC programmes as well as theoretical frameworks.

Predominant evaluation theoretical perspectives

In the process of developing a requisite inputs evaluation model for the hospitality sector, various empirical literatures were consulted covering a wide range of evaluation theories. Among them are Van Berkel et al. (2013) "process evaluation of a workplace health promotion intervention...", Olsen et al. (2012) "how to use programme theory to evaluate the effectiveness of schemes...", Mark and Henry (2013) "logic models and content analyses for the explication of evaluation theories" and Greene (2013) "logic and evaluation theory". The programme theory was adopted by Van Berkel et al. (2013) while Tokmak et al. (2013) adopted the

programme theory in the framework of Context, Input, Process, Product (CIPP) evaluation model for evaluation. The diffusion of innovation (DOI) theories was successfully adopted by Botillen (2008) in the "analysis of HIV/AIDS IEC interventions in Malawi". Thus, DOI was established as an apposite theory for the study of HIV and AIDS IEC interventions within any environment.

Diffusion of innovation (DOI) theory

The diffusion of innovation (DOI) theory explains how innovation spreads within a given society and the fundamental considerations necessary for its adoption to take place. The basic assumption of the theory is that the process of adoption of an innovation is not a single straight forward continuum, but rather it is a series of interrelated actions each of which has the capacity to make for an adoption (Rogers, 2005). Accordingly, the DOI theory posits that diffusion of innovation can best be understood when considered as several theoretical perspectives that relate to the overall concept of diffusion rather than as a single all-encompassing theory. This realisation led Rogers to develop the concept of theory of rate of adoption, the individual innovativeness and the innovation-decision process theories; each of which is capable of being individually studied.

The theory of rate of adoption is influenced by such factors as relative advantage, innovation compatibility, complexity, trial-ability and, observability. Workplace HIV and AIDS IEC programme strategy qualifies as an innovation since it has the capacity of having a relative advantage to organisations and is compatible with the activities taking place within the hospitality sector, is trialable and observable. The individual innovativeness theory relates to the degree to which an organisation is relatively earlier in adopting new ideas than others within their social system. In other words, the theory is based on who adopts the innovation and when. Accordingly, adopters are classified into five categories, which are: Early adopters (13%), early majority (34%), late majority (34%) and the laggards (19%) (Botillen, 2008). The Workplace HIV and AIDS IEC programme strategy fits into the individual innovative theory because hospitality sector adopters can be classified into early, early majority, late majority and laggards, hence could be studied using the DOI theory. The innovation decision process theory looks at the process of communicating information for decision making to adopt and implement innovations. The process consists of the innovation, information awareness, communication channels and target groups. Like any process, each of the components is on its own influenced by other variables such as compatibility, complexity, trialibility, and observability for decision making to occur. It therefore follows that if any of the process components is lacking or neglected, diffusion may not be achieved. The workplace HIV and AIDS IEC programme strategy as an innovation complies with these processes, hence, is capable of being studied using the DOI theory.

On the bases of the postulations of DOI theory, there can be no effective programme evaluation if necessary components of the implementation process and their intervening variables are not properly applied. With respect to innovation and knowledge, the workplace HIV and AIDS IEC programme as an innovation can only be effective if there is adequate information and education with respect to HIV and AIDS Information Awareness (HIVIA), Voluntary Counselling and Testing (VCT), and Condom Promotion and Distribution (CPD) programmes. Other programmes include Prevention-of-Mother-to- Child Transmission of HIV (PMTCT), Antiretroviral Therapy (ARV) and Safe-Male-Circumcision (SMC) programmes, which are properly communicated over time to arouse positive decision taking by recipients to change their risky sexual behaviours. The HIV and AIDS IEC intervention programmes- the innovation- which conforms to DOI's attributes of compatibility, trialibility and observability were subsumed in the inputs evaluation framework. The technological compatibility within the DOI theory

also informed the technological component of the input resource of the theoretical framework.

However, the DOI theory failed to meet the requirements for an input evaluation of a workplace HIV and AIDS IEC programme. With respect to programme evaluation process, the DOI theory is deficient in not explicitly highlighting each component of a programme inputs, such as resources (human, material and technological) institutional support mechanisms and target groups. This highlighted deficiency of the DOI made it inadequate to be used exclusively as an inputs evaluation framework. The authors, therefore, took into consideration such attributes as compatibility and complexity (that is, the items to be measured must be compatible to the hospitality sector in line with the complex nature of their activities), as well as trialibility and observability (that is, the new framework should be able of being tried and observed to affirm its suitability) in the development of HIVADIEF theoretical framework.

The programme theory

The programme theory is concerned with variety of ways of developing a causal model that links programme inputs and activities to a chain of intended or observed outcomes, and then using this model to guide evaluation (Legg et al., 2010; Rogers, 2008). The aim of programme evaluation is to determine the relevance of the programme, the fulfilment of objectives for which the programme was established, the development of efficiency, effectiveness and sustainability in the process (Rosen, et al., 2006). Programme theory is not just a list of tasks but a vision of what needs to happen, and how. Hence, programme theory provides a coherent picture of how change occurs and how to improve performance. Invariably, you cannot expect a great outcome if what is needed to happen and how it needs to happen had not taken place (Funnell and Rogers, 2011).

Programme evaluation can be categorised into process and outcome evaluations each of which is capable of being independently studied (Van Berkel et al., 2013). Process evaluation examines the extent to which the programme is delivered as designed. Process evaluation is concerned with the inputs, activities and the outputs segment of a programme. Outcome evaluation measures results. It looks at the direct effects of the programme implementation on target recipients (programme participants) by answering the question: How has the programme impacted the lives of participants on the short, medium and long term? (CDC, 2008). Since this paper is not interested in the outcome evaluation of the workplace HIV and AIDS programme strategy of the hospitality facilities in Botswana, only process evaluation has been reviewed.

Process evaluation theory: Logic model

Process evaluation Theory (PET) - logic model- refers to the systematic collection of information on a programme's inputs, the programme's context and other key characteristics (CDC, 2008). Process evaluation examines the activities and operations of a programme in order to understand how it is functioning (Olsen et al., 2012) and to ensure that the programme has been implemented as intended in the designing and planning processes (Rossi et al., 2004). The logic model is a visual framework that identifies components of a successful programme to be evaluated (Curry, 2008). The logic evaluation model can be drawn in different ways. Sometimes they are shown as a series of boxes. It can also be shown in a table, or as a series of results, with activities occurring alongside them rather than just at the start (Funnell and Rogers, 2011). This study chose to represent the logic model as a series of boxes (Figure 1).

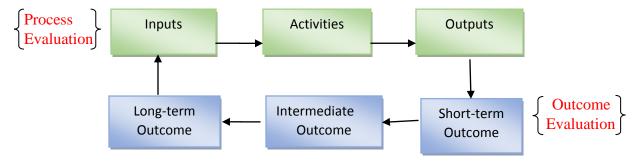


Figure 1. Programme theory: Logic model. Source: An Adaptation from Funnell and Rogers (2011).

Although the entire process evaluation can be evaluated as a one single study, each of the components (boxes) is capable of being studied as separate studies; that is, inputs, activities, and outputs evaluations just as the outcome can be studied on a short term, medium term and long term evaluations (Curry, 2008).

Many evaluators tend to be biased towards outcome (impacts) evaluation because it provides helpful information for top management in decision-making about the future direction of a programme (Sylvia and Sylvia, 2004). However, measuring programme outcomes without investigating the programme process can lead to incorrect conclusions about a programme such as assuming that a programme was not effective when in reality it might not have been implemented with fidelity (Curry, 2008). Nevertheless, the study is of the opinion that there can be no effective impact evaluation if the inputs process is not adequately addressed.

"By itself, program theory clearly does not provide guidance on gathering the evidence for monitoring and evaluation; it needs to be combined with evaluation expertise to draw appropriately from methods for research design, data collection, and data analysis" (Funnell and Rogers', 2011: 39 - 40). This implies that to be able to collect appropriate data that measures items compatible with the hospitality facilities, programme planning and execution must be in alignment with the complexity and context of the nature of the programme (HIV and AIDS) and the field of interest (hospitality sector).

RESULTS AND DISCUSSION

A model for input evaluation

The results of the study revealed that the key questions that inputs evaluation models need to address include: What are the interventions or programmes? What resources support the implementation of the programmes? What institutional support mechanisms are required? And who are the target groups? A satisfactory answer to each of these questions is a confirmation that the programme structure is well founded.

The HIVADIEF inputs evaluation model was based on an adaptation of the process evaluation framework. The need for a schematic presentation of an evaluation model flows from the fact that a visual depictions helps to clarify its most important features, components as well as their attributes (Hansen et al., 2012; Greene, 2013). The study's adoption of logic evaluation model is anchored on

many evaluation scholars who have adopted the model to articulate, compare and develop and analyse evaluation theoretical models (Mark and Henry, 2013; Vo, 2013; Dillman, 2013; Luskin and Ho, 2013).

On the bases of results of this study, the proposed inputs evaluation model (HIVADIEF Model), should comprise of the workplace HIV/AIDS IEC programmes, resources, institutional support mechanisms and IEC target groups (Figure 2).

Workplace HIV/AIDS IEC programmes

Workplace HIV/AIDS IEC programmes input include HIV/AIDS Information Awareness, Condom Promotion and Distribution, and Prevention of Mother-to-child Transmission programmes as well as Safe-male-circumcision, Voluntary Counselling and Testing and Antiretroviral Therapy IEC programmes (ILO, 2001; 2010; Botswana National Strategic Framework, 2010-2016). HIV/AIDS Information Awareness Programme (HIVIAP) provides requisite information and education about the pandemic to appropriate stakeholders. The aim is to empower them as part of efforts to curb the spread of HIV (ILO, 2001; 2010; National AIDS Council of Zimbabwe, 2010; Ministry of Labour and Social Security of Jamaica, 2011).

The basic information contained in HIVIAP include what HIV/AIDS is and what it is not, the difference between HIV and AIDS, the ways through which HIV is transmitted (sex, sharing of needle, and blood transfusion), and factors that aid their spread such as poverty, risky behaviours, alcoholism among others (Njororai et al., 2010; Keetile, 2014). Furthermore, the information should include the relationship between STIs and HIV and AIDS spread as well as prevention methods (Stangl et al., 2013). This would help to disabuse the minds of the stakeholders about the disease and reduce stigmatization and discrimination against people living with HIV and AIDS (PLWHA). Voluntary Counselling and Testing Programme aims at encouraging beneficiaries of AIDS information at the workplace to willingly want to subject themselves to proper medical testing procedures in order

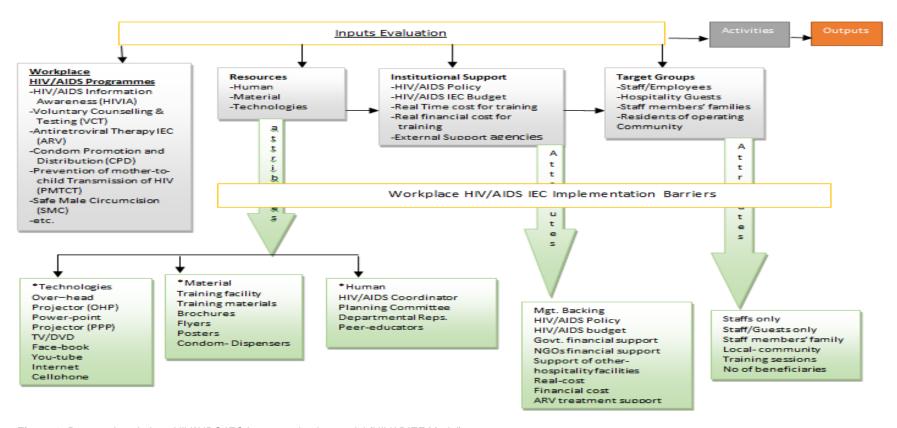


Figure 2. Proposed workplace HIV/AIDS IEC inputs evaluation model (HIVADIEF Model).

for them to get to know their HIV status (National AIDS Council of Zimbabwe, 2010). By combining personalized counselling with knowledge of one's HIV status, VCT is designed to motivate people to change their behaviours towards the acquisition and transmission of HIV. By so doing, they reduce anxiety over possible infection, facilitate safe disclosure of infection status that will aid organisations to plan for and improve access to HIV prevention and treatment services (Tedrow et al., 2012).

Condom Promotion and Distribution (CPD) IEC programme at the workplace aims at encouraging sexual partners to make use of condoms (Male and female) in situations of uncertainty about the HIV status of their partners for prevention from HIV and other STIs infections as well as prevent unintended pregnancy (Keetile, 2014). In the design and implementation of a successful CPD IEC programme at the workplace, there is need to establish organizational support for condom promotion and distribution activities as well as

encourage condom use (CDC, 2014). Because of the empirical evidence about its efficacy, the ILOAIDS and other national HIV/AIDS coordinating agencies stipulate Condom Promotion and Distribution IEC programme as a key component in any workplace HIV and AIDS IEC programme implementation (ILO, 2010).

Mother-to-child transmission (MTCT) of HIV has been documented to be by far the most common way through which children become infected with HIV, either during pregnancy, labour, delivery or breastfeeding. Hence, Prevention of Mother-to-Child Transmission of HIV/AIDS (PMTCT) IEC Programme is aimed at educating pregnant mothers and child bearing adults about safe motherhood (CDC, 2014). The would-be pregnant mothers that are positive are educated on how to prevent passing the virus to their partners and their new-born babies in addition to how to manage HIV and AIDS conditions (UNDP, 2012). Those that are negative are educated on how not to contract the virus and about happy mothering (CDC 2014).

Bio-medical trials have established that ARV treatment when started early has the propensity to elongate the lifespan of HIV-positive people very close to that of comparable HIV-negative people (Atuyambe et al., 2008). Because this treatment works (Setswe, 2009), the ILOAIDS requires that business organisations as part of the overall process of treatment and care for people living with HIV and AIDS (PLWHA) should implement workplace antiretroviral (ARV) IEC Programme. This entails assisting staff members particularly PLWHA to receive requisite information about treatment and care, and or access Highly Active Antiretroviral Therapy (HAART) treatment.

Safe-Male-Circumcision IEC programme is a sexual health intervention that aims at encouraging males to undertake safe circumcision at properly designated circumcision centres as part of efforts to reduce HIV transmission (Gray et al., 2007). The advent of HIV and AIDS and the need to limit its continued transmission and spread has heightened the health reasons for circumcision. Its adoption as a HIV and AIDS prevention programme (commonly referred as Safe-Male-Circumcision programme) followed medical and empirical evidence that it works (Setswe, 2009).

Although Safe Male circumcision does not completely protect against HIV, it is however rapidly becoming one of the most important science-based strategies for preventing HIV in Africa (WHO, 2015). UNAIDS and WHO project that, if adopted successfully as an additional HIV prevention method, male circumcision could responsible for the prevention of millions of new cases of HIV (Herman-Roloff et al., 2011). The expectation is that most organisations mainstreaming the workplace HIV/AIDS IEC programmes in Botswana and elsewhere should implement the programme (UNAIDS, 2015). Nonetheless, there does not seem to be any theoretical model that incorporates these programmes that can provide a benchmark for scientific evaluation of a workplace HIV and AIDS IEC programmes.

Resources

Resources required for effective implementation of any workplace HIV/AIDS IEC programme include human, material and technological resources. Each of these resources has its critical role in the final effective

implementation of the programme (ILO and SAfAIDS, 2010). Human resources refer to the various personnel requirement for an effective implementation of workplace HIV/AIDS IEC programme. They comprise of the HIV/AIDS coordinator who is responsible for planning, developing and coordinating all HIV and AIDS activities. The HIV/AIDS coordinator should be assisted by an implementation committee (a team of specialists), workers committee as well as peer educators (Jamaica Hotel and Tourist Association, 2007; ILO and SAfAIDS, 2010). Recognising that some organisations might be small, made up of few staff, it has been recommended that the operational/general manager and one or two members of staff could constitute the implementation committee.

Material resource input for a workplace HIV and AIDS IEC programmes implementation refer to the various items which when available enhance programme delivery. As per ILO (2001, 2010) provisions, organisations intending to implement workplace HIV and AIDS IEC programmes are required to provide necessary materials. These include training facility (classroom, environment for training), training materials (teaching aids, flipcharts and writing platforms and print materials (posters, brochures, banners and flyers), as well as condoms and condom dispensers (National AIDS Council of Zimbabwe, 2010; Ministry of Labour and Social Security of Jamaica, 2011). Because of its importance to an effective workplace HIV and AIDS IEC programmes delivery, it is expected that all organisations implementing the programme should have appropriate material resources in place.

Although technological resources for communicating HIV and AIDS information at workplaces vary, the ILO and many national HIV and AIDS policies recommend that mainstreaming work organisations provide such technological resources as cell phones (via WhatsApp, SMS, MMS, etc.), computer systems via the internet, Face-book, and You-Tube as well as radio, and television (Ajuwon, 2006; Jennings et al., 2013). Other technologies for conducting seminars and workshops include manual overhead projectors and the electronic power-point projectors. The expectation is that the availability of these resources will enhance the effective delivery of workplace HIV and AIDS IEC programmes of organisations (Ministry of Labour and Social Security, Jamaica, 2011).

Institutional support mechanism

Institutional support mechanism (ISM) refers to series of actions and efforts put in place by an organisation to reinforce the successful implementation of its workplace HIV/AIDS IEC programme strategies. ISM is the starting point for any workplace HIV and AIDS IEC programme delivery. Without a robust institutional support mechanism an organisation may not be able to effectively implement its workplace HIV/AIDS IEC programme strategy (ILO,

2010). The constituents of institutional support mechanism include management backing for the programme. This is crucial not only because HIV/AIDS affects the workforce, but because the management develops the workplace HIV/AIDS policies and determines resource allocation of their organisations (ILO, 2010).

Other elements of institutional support mechanism allocation of dedicated budget for the implementation of the programme. This is critical to workplace HIV/AIDS successful implementation. Without a specific budgetary allocation, the implementation of the programme may become constrained (National AIDS Council Zimbabwe, 2010). Besides, the provision of annual budget for HIV/AIDS by a facility shows the level of importance the facility attaches to the fight against the pandemic as well as helping in the calculation of facility level, sector as well as national cost of fighting HIV/AIDS. Furthermore, the model provides for external financial support for workplace HIV/AIDS programmes. This is in line with ILO (2001; 2008) provisions which require private sector organisations to explore innovative approaches in the form of internal and external financial support to defray costs for their programmes.

Within the institutional support mechanism are workplace HIV/AIDS IEC trainings that are targeted at, and adapted to the hospitality facilities different target groups. Imbedded within the training sessions is their timing. It is proposed that trainings be at real-time (conducted using the facilities official time) and at real-cost to the hospitality facilities (conducted at no extra cost to the participants). The assumption of the HIVADIEF model with respect to training is that regular training would help to constantly update target groups on HIV/AIDS issues. In addition, conducting the trainings at real cost and time encourages greater participation of target groups thus ensuring maximisation of training benefits.

Proposed within the institutional support mechanism component is workplace HIV/AIDS IEC policy. The policy gives credence and direction to the programme (Bakuwa and Mamman, 2012). It spells out the reasons why a hospitality facilities is embarking on HIV/AIDS IEC programmes, how the policy relates to other company policies, the rights of those affected by HIV/AIDS and the issue of stigma and discrimination. The HIV/AIDS IEC policy thus presents a road map for proper programme implementation. Without it, the programme will lack direction and the prospects for successful programmes implementation might turn out to be a wishful thinking (Zengeni and Zengeni, 2012).

ARV IEC and treatment support forms part of the institutional support mechanisms of the proposed input evaluation model. The ILO and Botswana National workplace HIV/AIDS policy among others have specifically provided for staff members of mainstreaming workplace HIV/AIDS organisations to be supported in the area of ARV IEC as well as in accessing treatment.

According to ILO recommendation "...these services could include the provision of antiretroviral drugs, treatment for the relief of HIV-related symptoms, nutritional counselling and supplements, stress reduction and treatment for the more common opportunistic infections" (ILO, 2001:17). This is irrespective of the fact that many national governments (e.g. Botswana) do provide free ARV treatments for their citizens.

Not including and implementing the ARV IEC programme on the premise of government free treatment could be counterproductive to availability organisations and the nation as a whole. Failure to extend ARV IEC and treatment support to staff who are non-citizens may at the end exacerbate the progression of HIV and its related opportunistic diseases; which can come back to haunt the facilities or the country. Assuming that HIV/AIDS is someone else's problem, or ignoring the affected staff and hoping that the disease is not there or that it will simply go away, are but grave assumptions at the peril of a hospitality facility (Keba Africa, 2014).

IEC target groups

Workplace HIV/AIDS IEC programme target groups refer to different individuals and or groups for whom the HIV/AIDS IEC programmes of a business organisation are destined. These include staff, their family members, and guests/customers as well as residents of the hospitality facility local community. Staff members include all cadres of staff from managers to shop-floor personnel (ILO and SAfAIDS, 2010). The proposed model recognises the inclusion of all cadres of staff in workplace HIV/AIDS education programmes.

The importance of including staff members' families in the proposed workplace HIV/AIDS programmes of hospitality facilities stems from the symbiotic relationship between staff of hospitality facilities and their families. In the first place, a staff member who has left an HIV sick person at home will be unable to perform maximally. Secondly, staff members' families are also part of the business operating environment. Hence, incorporating them in the workplace HIV/AIDS IEC programme of an organisation enhances their knowledge of the pandemic and contributes to their moderation of behaviours too (Forsythe et al., 2006; ILO, 2012).

The need to incorporate the residents of local communities in the workplace HIV/AIDS IEC programmes of organisations flows from different reasons. Firstly, there is an interdependent relationship between a hospitality facility and its local environment. Whatever affects the residents affects the facility's business also. Secondly, the fact that members of staff and their families reside and interact with other residents of that community who often times interact with one another as well as with foreign visitors exposes them to the risk of HIV infection.

Thirdly, a local resident who is not educated sufficiently on the modus-operandi of the disease who eventually enters into un-protected sexual relationships that leads to being infected puts her/him and all in the community at further risk of HIV infection and spread of the disease. The need to also target tourist or hospitality guests in any workplace HIV/AIDS IEC programme implementation flows from the reasons already advanced (Johnson, 2014; ILO, 2011).

The basic proposition of the logic model approach of the HIVADIEF input evaluation model lie in its visual depiction of the features of its component parts and their requisite measuring attributes. Thus, an evaluator has a clear picture of the essential input required for an effective workplace HIV/AIDS programme IEC implementation; as patterns across the theoretical logics are readily apparent when examining their visual representations (Miller, 2013). This corroborates some previous logic evaluation models. Mark and Henry (2004) and Cousins (2013) who adopted the model to describe aspects of evaluation practice (Mark and Henry, 2013). Although the logic model is majorly criticized as being static in relation to its environment as the dynamics of a particular model is not sufficiently described in a linear form (Miller, 2013). HIVADIEF input evaluation model has done well to eliminate this shortcoming by being linearly interactive (Figure 2).

Challenges of workplace HIV/AIDS IEC programme implementation

The implementation of workplace HIV/AIDS **IEC** programme within the hospitality sector may be the panacea to curbing further spread of HIV from the place of work. However, the successful implementation of the programme is faced with series of challenges. Prominent among the immediate challenges are fear to disclose HIV status and fear for stigma and discrimination on the side of members of staff in the event of disclosing HIV status; time to set aside to conduct HIV/AIDS IEC trainings and financial cost of implementing the programmes. Other constraints on the long run include low level HIV/AIDS information awareness on the part of hospitality facilities management as to their role in the implementation of workplace HIV/AIDS IEC programmes; the small size of most hospitality businesses and lack of requisite human, material and technological resources. The general societal impression that government is already doing much to that effect could also be a constraint. However, that government is doing much on its own does not foreclose hospitality facilities from supplementing the government by implementing their own workplace HIV/AIDS programmes/policies (Asingwire and Birungi, 2006). On the part of government and its agencies the key challenge is that of monitoring and supervision to ensure compliance by hospitality facilities.

CONCLUSION AND RECOMMENDATIONS

The HIVADIEF evaluation model has helped to broaden the knowledge base in the field of workplace IEC studies, workplace HIV and AIDS evaluation studies, and especially with respect to the hospitality sector. Its successful adoption and utilisation in evaluation studies means it is capable of being progressively adapted to suit future studies across different academic disciplines. The study now recommends HIVADIEF input evaluation model for researchers in the fields of library and information science, HIV and AIDS evaluation studies and other health programmes evaluation studies.

The HIVADIEF theoretical model has been developed specifically for the hospitality sector. The study recommends the model to hospitality facilities in Botswana

The study recommends the model to future inputs evaluation researchers in Botswana and elsewhere with a view to further developing and improving the HIVADIEF theoretical framework model.

Conflicts of Interests

The authors have not declared any conflict of interests.

REFERENCES

Ajuwon GA (2006). Alternative Strategies for HIV/AIDS Information Dissemination in Nigerian Rural Communities. J. Hospital Libr. 6(2):27-41.

Asingwire A, Birungi S (2006). Managing AIDS in the Workplace: A Baseline Survey Report, Netherlands, Stop AIDS Now. Available at: http://stopaidsnow.org/sites/stopaidsnow.org/files/WPP_Report%20B aseline%20Study%20Uganda-May2006.pdf

Atuyambe L, Neema S, Otolok-Tanga E, Wamuyu-Maina G, Kasasa S, Wabwire-Mangen F (2008). The Effects of Enhanced Access to Antiretroviral Therapy: A Qualitative Study of Community Perceptions in Kampala City, Uganda. Afr. Health Sci. 8(1):13-9.

Bakuwa R, Mamman, A (2012). Factors Hindering the Adoption of HIV/AIDS Workplace Policies: Evidence from Private Sector Companies in Malawi. Int. J. Human Res. Mgt. 23(14):2917-2937.

Botillen ÅA (2008). Diffusion of innovations and HIV/AIDS: Analysis of IEC-interventions in Malawi. Unpublished master's thesis, Oslo University College, Oslo, Norway.

Botswana National HIV/AIDS Strategic Framework- 1 (2003-2009). Gov. Bots. Gab. Botswana. Available at: http://www.ub.bw/ip/documents/2003_Botswana%20National%20Strategic%20Framework%20for%20HIVAIDS.pdf

Boulmetis J, Dutwin P (2011). The ABCs of Evaluation: Timeless Techniques for Programme and Project Mangers. Jossey-Bass Inc. Pub. San Francisco, Cal. US.

Carden F, Alkin MC (2012). Evaluation Roots: An International Perspective. J. MultiDiscip. Eval. 8:17.

Center for Disease Control (CDC) (2008). Introduction to Process Evaluation in Tobacco Use Prevention and Control. CDC Atlanta, Georgia, US.

Center for Disease Control (CDC) (2014). Condom Distribution as a Structural Level Intervention: Scientific Support for Condom Distribution. CDC Atlanta, Georgia, US. Available at http://www.cdc.gov/hiv/prevention/programs/condoms/

Chileshe PS (2010). The Implementation of HIV/AIDS Workplace Programme in the Ministry of Education in Zambia, Master Thesis,

- Stellenbosch University, South Africa.
- Cousins JB (2013). When Does a Conceptual Framework become a Theory? Reflections from an accidental theorist. Eval. Prog. Plan. 38:67-70.
- Curry A (2008). Integrating Programme Process and Outcome: A Programme Evaluation Using the Logic Model Framework. ProQuest 14(1):29-48.
- Dillman L (2013). Comparing Evaluation Activities across Multiple Theories of Practice. Eval. Program Plann. 38:53-60.
- Forsythe S, Whiteside A, Smart R (2006). AIDS Brief for sectoral planners and manager: Tourism Sector. Uni. Natal Hea. Econ. HIV/AIDS Res. Div. South Africa. Available at: http://www.heard.org.za/
- Funnell SC, Rogers PJ (2011). Purposeful Program Theory: Effective Use of Theories of Change and Logic Models. Available at: http://eu.wiley.com/WileyCDA/WileyTitle/productCd0470478578
- Gray RH, Kigozi G, Serwadda D, Makumbi F, Watya S, Nalugoda F, Kiwanuka N, Moulton LH, Chaudhary MA, Chen MZ, Sewankambo NK (2007). Male Circumcision for HIV Prevention in Men in Rakai, Uganda: A Randomised Trial. Lancet 369(9562): 657-666.
- Greene JC (2013). Logic and evaluation theory. Eval. Prog. Plan. 38:71-73.
- Hansen M, Marvin CA, Wallace TL (2012). Depicting the Logic of Three Evaluation Theories. Elsevier, Eval. Prog. Plan. 38:34-43.
- Herman-Roloff, A, Otieno, N, Agot, K, Ndinya-Achola, J, Bailey, RC (2011). Acceptability of Medical Male Circumcision among Uncircumcised Men in Kenya One Year after the National Male Circumcision Program. PLoSONE 6(5):10-1371.
- International Labour Organisation (ILO) (2001). An ILO Code of Practice on HIV/AIDS and the World of Work. Geneva, International Labour Office, Switzerland.
- International Labour Organisation (ILO) (2010). Recommendation Concerning HIV and AIDS and the World of Work, 2010 (No. 200). Int. Labour Office, Geneva. Retrieved on 26/05/15, from HIV / AIDS / occupational health / occupational safety / workers' rights / ILO.
- International Labour Organisation (ILO), SAfAIDS (2010). Workplace HIV and AIDS Policy and Programme Development: Training Manual 2010. Available at: http://www.ilo.org
- International Labour Organisation (ILO) (2011). HIV/AIDS in the Workplace: How Companies can make the difference in Prevention and Treatment of HIV/AIDS- Webinar Presentation, Meeting Document 28th November 2011, Geneva, Switzerland. Available at: www.ilo.org/empent/Eventsandmeetings/WCMS
- International Labour Organisation (ILO) (2012). Desk Review of Research on HIV/AIDS in the World of Work. Available at: file:///C:/Documents%20and%20Settings/Administrator/My%20Documents/Workplace%20Programmes/Workplace%20AIDS%pdf
- Jamaica Hotel and Tourist Association (JHTA) (2007). Jamaica Hotel & Tourist Association HIV/AIDS Workplace Programme. Kingston, Jamaica. Available at: http://www.jhta.org/
- Jennings L, Ong'ech J, Simiyu R, Sirengo M, Kassaye S (2013). Exploring the use of Mobile Phone Technology for the Enhancement of the Prevention of Mother-to-child Transmission of HIV program in Nyanza, Kenya: A Qualitative Study. BMC Public Health (13):1131.
- Johnson LC (2014). Work at the Periphery: Issues of Tourism Sustainability in Jamaica. Culture Unbound (6):949–962. Available at: http://www.cultureunbound.ep.liu.se
- Keba Africa (2014). Importance of Workplace HIV/AIDS Policy in the Fight against HIV/AIDS Pandemic. Available at: http://www.kebaafrica.org/2011/12/
- Keetile M (2014). High-risk Behaviours among adult men and Women in Botswana: Implications for HIV/AIDS Prevention Efforts. SAHARA J. 11(1):158-166.
- Labaree R (2014). Organising Your Social Sciences Research Paper. University of Southern California (USC) Libraries. Available at: http://libguides.usc.edu/writingguide
- Legg S, Ölsen K, Lamm F, Laird I, Harris LA, Halse P (2010). Understanding the Programme Theories Underlying National Strategies to Improve the Working Environment in Small Businesses. Policy Pract. Health Safety 8(2):5-35.
 - Luskin RJC, Ho T (2013). Comparing the Intended Consequences of Three Theories of Evaluation. Eval. Prog. Plan. (38):61-66.

- Mark MM, Henry GT (2013). Logic Models and Content Analyses for the Explication of Evaluation Theories: The Case of Emergent Realist Evaluation. Eval. Prog. Plan. (38):74-76.
- Mark MM, Henry GT (2004). The mechanisms and outcomes of evaluation influence. Evaluation 10:35-57.
- Miller RL (2013). Logic Models: A Useful Way to Study Theories of Evaluation Practice? Eval. Prog. Plan. 38:77-80
- Ministry of Labour and Social Security (MLSS) (2011). Green Paper on National Workplace Policy on HIV/AIDS. Gov. Jamaica, Kingston. Available at:
- http://www.mlss.gov.jm/download/NationalWorkplacePolicyDraft.pdf Mogalakwe M (2006). Research Report: The Use of Documentary Research Methods in Social Research. Afr. Soc. Rev. 10(1):221-230
- National AIDS Coordinating Agency (NACA) (2015). Botswana National HIV/AIDS Strategic Framework- 2 (2010 2016). Gov. Botswana, Gaborone, Botswana. Available at: http://www.ub.bw/ip/documents/2003_Botswana%20National%20Strategic%20Framework%20for%20HIVAIDS.pdf
- National AIDS Coordinating Agency (NACA) (2014). Progress Report of the National Response to the 2011 Declaration on HIV/AIDS: Reporting Period 2014. Available at: http://www.unaids.org/sites/default/files/country/documents/BWA_nar rative_report_2015.pdf
- National AIDS Council Zimbabwe (NACZ) (2010). Workplace HIV and AIDS Policy and Programme Development Guide. Gov. Zimbabwe, Harare, Zimbabwe.
- Njororai F, Bates D, Njororai WWS (2010). Review of literature on HIV/AIDS Voluntary Counselling and Testing in Sub-Saharan Africa: Towards a Social Transformation Model. Int. J. Health Promotion Educ. 48(3):68-78.
- Olsen K, Legg S, Hasle P (2012). How to use Programme Theory to Evaluate the Effectiveness of Schemes Designed to Improve the Work Environment in Small Businesses. Work 41 Suppl 1:5999-6006.
- Rogers EM (2005). Diffusion of Innovations (5th Ed.). New York: Free Press.
- Rosen S, Feeley F, Connelly P, Simon JL (2006). The Private Sector and HIV/AIDS in Africa: Taking Stock of Six Years of Applied Research. Boston University Center for International Health and Development.
- Rossi PH, Lipsey MW, Freeman HE (2004). Evaluation: A Systematic Approach 7th Edition. SAGE Publication, New York.
- Setswe GKG (2009). HIV Prevention: Where is the Evidence of Interventions that Work? Human Sc. Res. Council (HSRC), Sahara Conference. Available at: http://www.slideshare.net/NicoPaul/01
- Stangl AL, Lloyd JK, Brady LM, Holland CE, Bara S (2013). A Systematic Review of Interventions to Reduce HIV-Related Stigma and Discrimination from 2002 to 2013: How Far Have We Come? J. Int. AIDS Soc. 16(Suppl 2):18734.
- Sylvia RD, Sylvia KM (2004). Programme Planning and Evaluation for the Public Managers. Long Grove, 11, Waveland Press.
- Tedrow V, Denison, J, Kennedy, C, O'Reilly, K, Sweat, M (2012). Voluntary Counselling and Testing (VCT) for changing HIV Related Risk Behaviour in Developing Countries: A Systematic Review and Meta-analysis._Research to Prevention Publication. Available at: http://www.jhsph.edu/research/centers-and institutes/research-to-prevention/publications/VCT.pdf
- Tokmak HS, Baturay M, Fadde P (2013). Applying the Context, Input, Process, Product Evaluation Model for Evaluation: Research, and Redesign of an Online Master's Program. Int. Rev. Res. Open Distr. Learn. (IRRODL) 14:3.
- UNAIDS (2015). Global AIDS Response Progress Reporting February 2015. Available at: http://www.theglobalfund.org/en/about/diseases/hivaids/?gclid
- UNDP (2012). Botswana National Policy on HIV and AIDS Revised Edition 2012. Available at: http://www.bw.undp.org/content/dam/botswana/docs/HIVAIDS/Botswana%20HIV%20and%20AIDS%20Policy%202012.pdf
- Van Berkel J, Boot CRL, Proper KI, Bongers PM, van der Beek AJ (2013). Process Evaluation of a Workplace Health Promotion Intervention Aimed at Improving Work Engagement and Energy Balance, J. Occup. Environ. Med. 55(1):19-26.
- Vo AT (2013). Visualizing context through theory deconstruction: A

content analysis of three bodies of evaluation theory literature. Eval. Prog. Plan. 38:44-52.

World Health Organisation (WHO) (2015). HIV/AIDS: WHO Launches New Guidelines on HIV Testing Services. World Health Organization, Geneva, Switzerland. Available at: http://www.who.int/hiv/en/

Zengeni DMF, Zengeni N (2012). Impact of HIV/AIDS to the Tourism Sector Human Resources: Case of Selected Hotels in Harare. Int. J. Dev. Sust. 1(3):1-15.